Dell Precision M50: Mobile Workstation

The Dell Precision™ Mobile Workstation M50 is specifically designed for professional workstation users who require the freedom and flexibility to be productive whilst on the go.

Dell | Precision M50

The Dell Precision™ Mobile Workstation M50 will target Mechanical Computer Aided Drawing (MCAD), Architecture Engineering Construction (AEC), Digital Content Creation (DCC), Global Information Systems (GIS) and software development market segments that require optimal 3D Open-GL workstation-class graphics with ISV certification. Customers in these target markets have the need to push data around the world but want the freedom and flexibility to be productive whilst on the go. These applications can take advantage of the latest mobile Intel® Pentium® 4 processors-M and the newest Intel 845MP chipset. The Pentium 4 processors are mobile versions of their desktop processors. The new Intel 845MP chipset is optimised for use with mobile Pentium 4 processors with a faster Processor Support Bus (PSB).

Performance you can use on the go

The M50 uses the latest mobile Intel Pentium 4 processors-M. It includes on-die 512K L2 cache and starts at a whopping 1.8GHz. The chipset used on the M50 is the newest Intel 845MP chipset that is optimised for use with mobile Pentium 4 processors and has a pumped up Processor Support Bus (PSB) speed of 400MHz, up to 1024MB of Double Data Rate (DDR) system memory running at 266MHz, 4X AGP graphics, and supports the ATA-100 hard disk drive interface. The M50 also supports the newest (Enhanced) Intel SpeedStep™ technology to enable automatic or user-controlled changes between two performance modes, where the maximum performance is typically used when running on AC power and the more conservative setting is typically used when running on DC (battery) power.

Workstation-class graphics

The M50 comes as standard with the newest nVidia® Quadro4™ 500 GoGL graphics controller, which incorporates workstation-specific functionality to accelerate OpenGL® and DirectX® professional applications. Some of these features include 64MB of Double Data Rate (DDR) graphics memory for large texture models, hardware accelerated anti-aliased lines, OpenGL Hardware overlay planes, two-sided lighting, full-scene anti-aliasing, 3D clipping planes and occlusion culling. The Quadro4 500 GoGL graphics controller features nView™ multi-monitor support, which allows the use of separate images on the system display and external monitor or projector. Also available are the nVidia workstation applets, such as PowerDraft and MAXtreme that can offer performance enhancement on many of the leading CAD and 3D applications. The QuadroView applet also allows the user to view AutoCad and 3D StudioMax drawings without having to load the native applications. Professionals using these intensive graphics applications can now work just as productively whilst on the go, with the added comfort of a large high resolution Dell UltraSharp™ 15" Enhanced UXGA (1600 x 1200) TFT display. The benefits of Dell Enhanced UXGA over standard Dell UXGA TFT are that it provides faster response times for improved viewing of motion pictures, brighter and better contrast ratio for rich and sharp colours and wider viewing angles that allow the user to view the screen from various positions without compromising image quality.

ISV Application Certification

Certified key ISV workstation applications drivers, which are consistent with the Dell Precision workstation branding: (availability up to 60 days post RTS) Discreet - 3D Studio; SDRC - IDEAS; MSC. Software; SolidWorks; PTC- Pro/E, Designer, CDRS; UG/Solutions, SolidEdge; AutoDesk - AutoCAD, Inventor; ESRI - Arc/INFO, Arc/VIEW; Dassault - CATIA; Fluent; Maya - Alias Wavefront; Landmark Graphics; ANSYS; AVID; Newtek; SoftImage - XSI; BENTLEY - Microstation.

Easy Communications

The M50 offers many ways to communicate: Integrated 3Com 10/100 Base-TX Ethernet and v.92 56K modem and the Mini-PCI slot is available for an optional wireless upgrade. Each M50 is wireless ready and has integrated antennae so you can quickly and simply upgrade to a wireless network via the optional Dell TrueMobile™ Mini-PCI 802.11b wireless LAN card.

Scalable Design

The M50 uses an all-in-one 3-spindle design, which allows for simultaneous use of two optical drives or, alternatively, a single optical drive and another C-family module for added flexibility and configurability. The Dell Precision M50 is compatible with Dell Latitude C-Family media bay modules to provide incremental investment protection.

Easy to Connect

The M50 offers different I/O connections, such as USB, infrared sensor, external video, audio connectors, PS/2, serial, parallel, docking connector, S-video and IEEE 1394 for high performance digital connection to cameras and external storage.

3 Years International Service[1]

Award-winning service and support with 3 years Next Business Day On-site service[2].

Dell Precision M50

SYSTEM	
Processor	Mobile Intel® Pentium® 4 Processor-M starting at 1.8GHz
Cache	512KB on-die L2 cache
Chipset	Mobile Intel 845MP Chipset; 400MHz Processor System Bus (PSB)
Memory	PC2100 Double Data Rate (DDR) SDRAM standard Memory Configurations: 256MB, 512MB, 1024GB
Display	Dell UltraSharp 15" TFT Enhanced UXGA
Maximum External Resolution (CRT)	1600 x 1200 (UXGA) at 4.2 billion colours max @ 60/70/75/85Hz (Pan mode on LCD/TV if active)
Video	Video Type – 256-bit hardware accelerated; 4X AGP support Graphics Controller – nVidia® Quadro4™ 500 GoGL with 64MB DDR graphics memory standard
Hard Disk Drives	40GB, 60GB ATA-100 - High Performance, 5400 RPM Optional 2nd HDD Module for media bay or C/Dock II Expansion Station media bay
PC Card Slots	Two type I or II cards or one type III card CardBus and Zoom Video support (bottom slot)
Audio	Audio Type - SoundBlaster® (software emulation capable); Audio controller - Crystal CS4205; Integrated Speakers Stereo (2 x 4 ohm); Integrated microphone
Battery	Smart Lithium-Ion with external LED battery gauge; Capacity 8-Cell with ExpressCharge™ capability
Keyboard	88-Key (Europe); Key travel: 3mm; Key spacing: 19mm
Pointing Device	Touch Pad - PS/2 compatible; Track Stick - PS/2 compatible
Power Supply	90 Watts AC adapter
System Dimensions	15" LCD Configuration – 330mm (w) x 276mm (d) x 44mm (h)
System Weights*	15" Dell UltraSharpTM UXGA Configuration • With CD-RW/Travel module - 3.45 kg. • With CD-RW/FDD module - 3.69 kg. *Weight may vary depending on configuration and manufacturing variability
I/O PORTS	
Serial	9-pin connector; 16550-compatible, 16-byte buffer
Parallel	25-hole connector; normal, bi-directional or ECP
Video	15-hole connector
PS/2	6-pin mini-DIN connector
Infra red	IrDA v1.1 (Fast IR) & IrDA v1.0
Audio	Microphone-in, line-in audio-in, headphones/speaker
Universal Serial Bus	2 x USB-compliant connectors
Docking connector	200-pin for the C/Dock Family Expansion Station and C/Port Family Advanced Port Replicator
S-Video	7-pin mini DIN (S-Video to composite video adapter is also included with the computer, supports SP/DIF)
IEEE 1394	4-pin, Mini-1394, Non-powered
Modem	56K V.92 capable internal modem
Ethernet LAN	10/100 Ethernet LAN; 3Com® 3C920 10/100 Base-TX chipset PC99, DMI 2.0, and Wired for Management compliant
FIXED OPTICAL DRIVES	
Standard	CD-RW – 8X (write CD-R)/4X (write CD-RW)/24X (read CD) max
Optional	Combo DVD/CD-RW – 8X (read DVD)/8X (write CD-RW)/24X (read CD) max
MEDIA BAY (SWAPPABLE)	
Standard	Floppy Disk Drive Module: 3.5", 1.44MB
Optional	CD-ROM – 24X (max) DVD-ROM – 8X (max) Second HDD for notebook external media bay or C/Dock II media bay Second SMART Lithium-ion battery Second floppy disk drive for media bay in C/Dock II
DOCKING OPTIONS	
C/Dock II Expansion Station	Ports offered: 2 x PCI card expansion slots, parallel, serial, external monitor, line-in, line-out, mic, PS/2 keyboard, PS/2 mouse, 2 x USB, Infra red (IrDA v. 1.1 compatible), Ultra SCSI 2, 10/100BaseTX (RJ-45), AC power and adapter
C/Port II Advanced Port Replicator	Ports offered: parallel, serial, external monitor, line-out, PS/2 keyboard, PS/2 mouse, 2 x USB, Infra red (IrDa v. 1.1 compatible), 10/100BaseTX (RJ-45), AC power and adapter
MANAGEABILITY	
Dell OpenManage™ Client	OpenManage Client Instrumentation (OMCI) is designed to help reduce the total cost of ownership by providing remote monitoring of the mobile workstation in a networked environment. The instrumentation allows remote monitoring of specific attributes such as battery status, power management settings, display type, PC cards, SMART hard drive status, variable drive capacity thresholds and other information. OpenManage Client adheres to industry standards such as DMI 2.0s and WBEM specifications
Power Management	
ACPI	Microsoft® Windows® 2000 Professional
Mobile Security – Software	Protection against unauthorised access; Primary system password, Administrator password, Hard Disk Drive password
Mobile Security – Physical	Kensington Lock
Dell AccessDirect™	New to the Dell Precision M50 is the Dell AccessDirect button. Located above the keyboard, the AccessDirect button allows you to quickly access a frequently used program, such as e-mail or an Internet site IT Managers can remotely program this button to access their own internal support sites with a simple registry change. The individual user can also progam this button
Utility Software	On-line Hypertext User Guide
OPERATING SYSTEMS	
Operating System Versions Available	Windows XP Professional Windows 2000 Professional
SERVICE & SUPPORT	
SERVICE & SUPPORT[1]	3 Years Next Business Day On-site[2] Optional Services: Installation Services
ADDITIONAL WIRELESS LAN	
Options	Dell TrueMobile™ 1150 Wireless Mini-PCI Card[3] Dell TrueMobile 1150 Wireless PCMCIA Card[3] Dell TrueMobile 1170 Wireless Access Point
MOBILE ACCESSORIES	
Mobile Accessories[2]	CD, DVD, FDD, 2nd HDD Leather Carrying Case Nylon Carrying Case Second 90 Watts AC Adapter Second SMART Lithium-Ion Battery Kensington Security Lock

Dell recommends Microsoft® Windows® XP Professional for Business

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